

### Claims

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1. Process for fine machining of functional first surfaces on pre-machined and hardened transmission gear workpieces with a cylindrical boring, said first functional surfaces comprising a gearing, wherein in one and the same fixing of said workpiece on second surfaces not requiring hard machining, said gearing according to a continuously working generating grinding process and, at the same time, said boring are machined.
  2. Process, according to claim 1, wherein for the machining of the gearing (7) the continuous generating grinding using a cylindrical grinding worm is used.
  3. Process according to claim 1, wherein for the machining of the gearing (7) the continuous profile generating grinding with a globoid-like grinding worm is used.
  4. Process according to claim 1, wherein said functional first surfaces comprise a frontal surface and wherein the frontal surface is machined at the same time as said gearing and said boring.
  5. Process according to claim 3, wherein continuous profile generating grinding is used with subsequent honing in the same mounting.
  6. Process for fine machining of functional first surfaces on pre-machined and hardened transmission gear workpieces with a cylindrical boring, said first functional surfaces comprising a gearing, wherein in one and the same fixing of said workpiece on second surfaces not requiring hard machining, said gearing according to a continuously working generating machining process and, at the same time, said boring are machined.
  7. Process according to claim 6, wherein said machining process is a gear honing process.

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